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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Ingo Dunisch

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EXAMINER

WILLIAMS, JOSEPH L

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,980	<b>Applicant(s)</b> DUNISCH, INGO	
	<b>Examiner</b> Joseph L. Williams	<b>Art Unit</b> 2889	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 52-91 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 52-91 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election without traverse of claims 52-91 in the reply filed on 2/18/09 is acknowledged.

Claims 92-108 withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claims. Election was made **without** traverse in the reply filed on 2/18/09.

### ***Claim Objections***

2. Claims 85-90 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim *should refer to other claims in the alternative only*. See MPEP § 608.01(n). Accordingly, the claims not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 56, 57, 59, 60, 64, 65, 67, 75, 78, 79, 83, and 84 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent

Art Unit: 2889

protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 57 recites the broad recitation "of aluminum", and the claim also recites "preferably a sintered body" which is the narrower statement of the range/limitation.

Please note that claims 65, 78, 79, 83, and 84 have similar limitations.

Claim 64 recites the limitation "the second body part" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim 67 recites the limitation "the metal" in line 2 of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claims 59, 60, 67, and 75 recite the limitation and/or, which renders the claim indefinite.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2889

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 52-56, 59-61, 64-66, 68, 69, 72-81, and 91 are rejected under 35

U.S.C. 102(b) as being anticipated by Klomp (US 3,722,974), of record by Applicant.

Regarding claim 52, Klomp ('974) teaches in figure 2 and the corresponding text, a composite body, comprising: a first body part (1) made of glass and having an opening, and a mechanical connection (2), the composite body being a flash lamp (read gas discharge lamp), characterized in that the connection is melted onto the first body part, the connection contains aluminum having a purity of at least 99 weight per cent, and the opening of the first body part is closed by the connection.

Regarding claim 53, Klomp ('974) teaches a second body part (1') made of glass, the connection connecting both body parts.

Regarding claim 54, Klomp ('974) teaches the first body part at least regionally includes rounded edges where it contacts the connection.

Regarding claim 55, Klomp ('974) teaches the first body part at least regionally includes material reinforcements where it contacts the connection.

Regarding claim 56, Klomp ('974) teaches an auxiliary part consisting of a material having a thermal expansion coefficient smaller than that of aluminum, preferably glass, and connected to the first body part by means of the connection.

Regarding claim 59, Klomp ('974) teaches the connection includes powdery filler having a thermal expansion coefficient smaller than that of aluminum.

Regarding claim 60, Klomp ('974) teaches the filler includes glass powder.

Art Unit: 2889

Regarding claim 61, Klomp ('974) teaches the first body part and the connections are parts of an air-tight or vacuum-tight housing.

Regarding claim 64, Klomp ('974) teaches the first body part is part of a housing consisting of glass and the second body part is a metallic wire extending from the interior to the exterior of the housing.

Regarding claim 65, Klomp ('974) teaches the glass includes an oxide glass, particularly quartz glass.

Regarding claim 66, Klomp ('974) teaches the softening point of the glass is above the melting point of the connection.

Regarding claim 68, Klomp ('974) teaches the second body part is a preferably cylindrical glass body at least partially coated with aluminum, which is partially inserted in an opening of the first body part and partially protrudes therefrom.

Regarding claim 69, Klomp ('974) teaches the first body part is a glass tube at least one end of which is closed by the connection.

Regarding claim 72, Klomp ('974) teaches the first body part is a glass tube one end of which is closed by the connection, the connection including a solder layer on the outer surface.

Regarding claim 73, Klomp ('974) teaches the metal proportion of the connection is an aluminum alloy containing at least 90 weight per cent of aluminum.

Regarding claim 74, Klomp ('974) teaches the metal proportion of the connection contains at least 98 weight per cent of aluminum.

Art Unit: 2889

Regarding claim 75, Klomp ('974) teaches that the proportion needed to complete 100% includes silicon (read glass).

Regarding claim 76, Klomp ('974) teaches the connection on the outer surface comprises a metallic coating including lead.

Regarding claim 77, Klomp ('974) teaches the first body part is a tube having in one portion of its closure by the connection at least regionally a cross-sectional shape other than that in the free portion.

Regarding claim 78, Klomp ('974) teaches that together with the connection the tube in the closure portion has a cross-sectional shape wherein a cross-section through the connection respectively has a dimension DV of at most 1 mm, preferably 0.3 mm and more preferably 0.1 mm.

Regarding claim 79, Klomp ('974) teaches the connection the tube in the closure portion has a cross-sectional shape wherein a cross-section through the connection has a dimension DV which respectively is at most 10 %, preferably 3 % and more preferably 1% of a cross-sectional dimension DK throughout the whole body at the same site.

Regarding claim 80, Klomp ('974) teaches the connection the tube in the closure portion has a cross-sectional shape wherein a cross-section through the connection has a dimension BV which is larger than the inner diameter DI of the tube in the free portion.

Regarding claim 81, Klomp ('974) teaches that together with the connection the tube in the closure portion has a cross-sectional shape wherein a cross-section through the connection has a dimension BV which is larger than the inner diameter DI of the tube in the free portion.

Regarding claim 91, Klomp ('974) teaches the connection includes no coating at any time which serves to protect against oxidation and in particular consists of another metal.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 57, 58, 62, 63, 70, 71, and 82-84 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klomp (US 3,722,974), of record by Applicant, In view of C. Spaeth (US 1,908,649).

Regarding claim 57, Klomp ('974) teaches all of the claimed limitations except for the claimed inner electrode.

Further regarding claim 57 Spaeth ('649) teaches a gas discharge lamp comprised of, in part, an inner electrode for the purpose of producing efficient white light.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inner electrode of Spaeth in the gas discharge lamp of Klomp for the purpose of producing efficient white light.



Art Unit: 2889

Regarding claim 58, Klomp ('974) teaches an uncovered surface portion of the second body part protrudes into the interior of the composite body while the surface of the second body part protruding to the exterior is covered by the connection.

Regarding claim 62, Klomp ('974) teaches all of the claimed limitations except for the claimed inner electrode.

Further regarding claim 62 Spaeth ('649) teaches a gas discharge lamp comprised of, in part, an inner electrode for the purpose of producing efficient white light.

Hence, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inner electrode of Spaeth in the gas discharge lamp of Klomp for the purpose of producing efficient white light.

Regarding claim 63, the combination of Klomp and Spaeth teach that the electrode is mechanically held by the connection.

Regarding claim 70, Spaeth ('649) teaches the second body part includes a metallic portion preferably consisting of molybdenum and/or tungsten which is inserted inside of the tube in the connection, as well as a wire inserted from the outside in the connection.

The reason for combining is the same as for claim 57 above.

Art Unit: 2889

Regarding claim 71, Spaeth ('649) teaches the first body part is a glass tube one end of which is closed by the connection, the connection including barium on the inner surface.

The reason for combining is the same as for claim 57 above.

Regarding claim 82, Spaeth ('649) teaches that at least one end of the tube is formed in a bent manner.

The reason for combining is the same as for claim 57 above.

Regarding claim 83, Spaeth ('649) teaches that the bending comprises an angle (I J) ranging between  $45^{\circ}$  and  $135^{\circ}$ , preferably between  $80^{\circ}$  and  $100^{\circ}$ .

The reason for combining is the same as for claim 57 above.

Regarding claim 84, Spaeth ('649) teaches that the connection serves as an outer electrical; preferably solderable connection.

The reason for combining is the same as for claim 57 above.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minh-Toan Ton can be reached on (571) 272-2303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph L. Williams/  
Primary Examiner, Art Unit 2889